

PEDESTRIAN AND BICYCLE SAFETY

I. PROGRAM OVERVIEW

Pedestrian Safety

Statistics indicate there is a constant need to improve pedestrian safety:

- The Federal Highway Administration reports that a motorist injures or kills a pedestrian every seven minutes in the United States.
- In California, pedestrian-involved collisions make up 17 percent of the State's fatal collisions. Too often, the victims are children and senior citizens.

Creating more pedestrian-friendly communities and reducing the 700 deaths and 14,000 pedestrian injuries has become one of the hottest public safety and quality of life topics in California today. Safe Routes to School has become popular both within California and at the national level. While two thirds of kids walked to school just thirty years ago, today far fewer do, largely because of parent fears about traffic and crime.

Neighborhood residents are taking aim at speeders and cut through traffic by employing a host of street design techniques and state of the art equipment known as traffic calming. Many California communities including Oakland, Glendale, Sacramento, Santa Monica, Palo Alto, Escalon, and San Francisco have been using traffic calming measures to slow the speed of traffic on residential streets, reduce traffic injuries and fatalities and improve the quality of life for everyone involved.

In 2003, a total of 13,954 pedestrians were injured and 713 were killed statewide.

- Pedestrians represent 16.9 percent of all fatalities and 4.5 percent of all injuries.
- 20 percent of all 14,667 pedestrian victims were between the ages of 5-14.
- 10.7 percent of all pedestrian victims were 65 years of age or older.
- The age group most affected by injuries as pedestrians was the 5-14 years of age bracket with a total of 2,913 victims statewide (20.9 percent of all injured pedestrian victims). Among children age 14 and younger who are struck by vehicles, almost eight of ten incidents occur during daylight hours, dawn to dusk. Most child-pedestrian mishaps occur on residential streets within a short distance of the victim's home and/or school.
- The age group most affected by fatalities as pedestrians was the 35-44 years of age bracket with a total of 103 victims statewide (14.4 percent of all fatal pedestrian victims).
- The need to continue the efforts to address pedestrian safety among populations for which English is not their first language is alarming. In some communities, almost 100 percent of the pedestrian victims are non-English speakers. The last census showed a dramatic change in demographics in the last ten years, resulting in an increase in pedestrian population unfamiliar with the rules of the road, signage, and traffic management systems.

- School zones have been identified as danger zones for aggressive driving habits and behaviors. Communities have taken ownership of these areas by partnering with law enforcement, school officials, community based organizations, advocacy groups, parent-teacher associations, engineers and others to increase safety around local schools and decrease the alarming number of children who are killed or injured on their way to and from school.
- The new technology geared toward increased pedestrian safety warrants testing, implementation and evaluation. The efficiency of these devices is identified in some of the funded programs. The strategy toward pedestrian safety includes active school zone signs and in-pavement lighted crosswalks.

	1997	1998	1999	2000	2001	2002	2003
TOTAL VICTIMS							
Killed	3,671	3,459	3,559	3,730	3,926	4,136	4227
Injured	284,871	290,698	288,727	303,023	305,907	309,407	306,688
TOTAL PEDESTRIANS							
Killed	782	698	688	689	721	702	713
<i>Percent of Total Persons Killed</i>	21.30%	20.18%	19.33%	18.5%	18.37%	16.97%	16.87%
Injured	14,988	14,660	14,346	14,506	14,545	14,377	13,954
<i>Percent of Total Persons Injured</i>	5.26%	5.04%	4.97%	4.8%	4.76%	4.65%	4.55%
PEDESTRIANS UNDER 15 YEARS OF AGE							
Killed	84	55	86	64	72	60	61
<i>Percent of Total Persons Killed</i>	2.29%	1.59%	2.42%	1.72%	1.83%	1.45%	1.44%
Injured	4,666	4,407	4,231	4,310	4,161	3,980	3,569
<i>Percent of Total Persons Injured</i>	1.64%	1.52%	1.47%	1.43%	1.36%	1.29%	1.16%
PEDESTRIANS 65+							
Killed	207	179	151	186	179	172	191
<i>Percent of Total Persons Killed</i>	5.64%	5.17%	4.24%	4.99%	4.56%	4.16%	4.52%
Injured	1,386	1,332	1,320	1,337	1,320	1,353	1,373
<i>Percent of Total Persons Injured</i>	0.49%	0.46%	0.46%	0.45%	0.43%	0.44%	0.45%

Bicycle Safety

Following the rules of the roads while riding a bicycle may increase the chances of avoiding traffic collisions with vehicles. Bicycle or safety helmets have been shown to significantly reduce the risk of head and brain injury. In fact, it is estimated that as many as seven out of every eight bicycle related fatalities among children could have been prevented with a bicycle helmet.

In 2003:

- Bicyclists represent almost three percent of all fatalities and 3.5 percent of all injuries.
- 25.1 percent of bicyclists killed and injured were under age 15.

- Adults continue to represent a significant segment of the population “at-risk” for injury in a collision. Environmental issues, health concerns and increased traffic congestion have driven many communities and individuals to emphasize alternative means of commuting. Programs originated by employers, environmental groups, the healthcare community, and others encourage cycling among adults. As a result, it is not uncommon to find more adults riding bicycles.

	1997	1998	1999	2000	2001	2002	2003
TOTAL VICTIMS							
Killed	3,671	3,459	3,559	3,730	3,926	4,136	4,227
Injured	284,871	290,698	288,727	303,023	305,907	309,407	306,688
TOTAL BICYCLISTS							
Killed	115	107	118	116	116	125	124
<i>Percent of Total Persons Killed</i>	3.13%	3.09%	3.32%	3.11%	2.96%	3.02%	2.93%
Injured	13,441	12,152	12,254	12,145	11,412	11,462	10,795
<i>Percent of Total Persons Injured</i>	4.72%	4.18%	4.24%	4.01%	3.73%	3.70%	3.52%
BICYCLISTS UNDER 15 YEARS OF AGE							
Killed	18	15	11	21	11	19	15
<i>Percent of Total Persons Killed</i>	0.49%	0.43%	0.31%	0.57%	0.28%	0.46%	.35%
Injured	3,909	3,410	3,555	3,224	2,725	3,080	2,725
<i>Percent of Total Persons Injured</i>	1.37%	1.17%	1.23%	1.07%	0.89%	1.00%	0.89%

II. ACTION PLANS

Motor vehicle traffic poses a serious threat to children in neighborhoods, or near schools and parks. In order to achieve a safe environment for bicyclists and pedestrians, efforts need to be made toward the following goals:

- Motor vehicle operation to be strictly regulated
- Traffic laws to be complied with by all users

By changing behaviors, motor vehicle crashes, injuries and fatalities would decline significantly, as well as crimes of all kinds, especially in residential areas. Parents have the need to feel at ease with the notion of their children playing outside, enjoying their neighborhood.

The following overall action plan would prompt a behavioral change toward realizing the goal of a safer environment for bicyclists and pedestrians:

1. Driver Behavior: Ensure that all drivers are careful and responsible.
2. Vehicle Speeds: Control motor vehicle speeds in neighborhood, school, and shopping areas.
3. Environmental Design: Plan and design neighborhoods to reduce the threat of traffic collisions.

4. Enforcement: Improve policing and enforcement.

To achieve the greatest potential for reducing fatalities and injuries, OTS recommends grantees consider the following countermeasures when preparing their project agreements (*Note: The OTS “Blueprint” contain additional recommended “best practice” countermeasures*):

Public Information and Education

- To encourage state and local stakeholders (public or private resources) to promote bicycle and pedestrian safety education.
- To identify the groups at-risk in each targeted community and develop programs age and/or cultural specific.
- To promote safety helmet use for all bicyclists, skateboarders, skaters and scooter riders, regardless of age.
- To instill safe practices to children of all ages, especially those students walking or bicycling to and from school.
- To emphasize through the application of state of the art equipment and enforcement, traffic safety at school zones for pedestrians and motorists.
- To foster partnerships with the United States Air Force, the United States Navy and sports figures for promoting safety helmet usage.

Enforcement

- To promote and encourage the enforcement of the safety helmet and pedestrian laws.
- To implement court diversion classes for safety helmet law violators.

Health and Medical

- To promote preventive traffic safety programs through the health care industry and other governmental agencies dealing with the transportation of children.
- To provide informational sessions to medical personnel and community service staff on new laws and the proper use of safety equipment.

School and Community Programs

- To promote the implementation of safety helmet distribution programs and training on the proper fitting of safety helmets.
- To promote interactive educational programs that increase pedestrian and bicyclist skills and helmet compliance.

Engineering Programs

- To encourage engineers to consider traffic calming designs and equipment to promote pedestrian and bicycle friendly environments.

- To identify causes of pedestrian or bicycle crashes through the improvement of the collection of data.
- To encourage engineers to work in conjunction with local law enforcement agencies to improve pedestrian and bicycle safety in their community.

Special Populations

- To identify the challenges of targeted audiences and adapt programs to their needs.

III. Tasks

TASK 1 - PROGRAM DEVELOPMENT AND ADMINISTRATIVE COORDINATION

This task provides for the necessary staff time and expenses incurred by OTS that are directly related to the planning, development, coordination, monitoring, auditing, and evaluation of projects within this program area, and the preparation of the 2005 Highway Safety Plan. Assistance is also provided under this task to individuals to attend and participate in technology transfer workshops, training sessions, or educational meetings or conferences.

TASK 2 - PEDESTRIAN AND BICYCLE SAFETY PROGRAMS

This task provides funds for projects that target bicycle and pedestrian safety through the school system and local communities. Activities to be conducted for these projects include traffic safety rodeos at schools and community events; traffic safety workshops tailored for targeted audience; public awareness campaigns (public service announcements, billboards, pamphlets, etc.); helmet distribution programs; bicycle and pedestrian diversion alternatives for cited youth; and increased enforcement around schools. The main goals of these projects are to decrease the number of fatal and injured victims resulting from traffic collisions with bicyclists and/or pedestrians, and to increase public awareness of traffic safety practices for pedestrians, bicyclists and motorists.

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Project No.	Agency	TARGET AUDIENCE			ACTIVITIES			2005 Funds
		Youth	Seniors	General	Rodeos Workshops	Helmets	Public Information/Multicultural	
PS0310	Lodi	Yes	Yes	No	Yes	Yes	Yes/No	\$16,042
PS0409	Lancaster	Yes	No	No	Yes	No	No/No	\$15,000
PS0415	Riverside	Yes	No	No	No	Yes	No/Yes	\$95,882
PS0416	Sacramento	Yes	Yes	Yes	Yes	Yes	Yes/Yes	\$12,700
PS0422	Tulare	Yes	No	No	Yes	Yes	Yes	\$207,648

Project No.	Agency	TARGET AUDIENCE			ACTIVITIES			2005 Funds
		Youth	Seniors	General	Rodeos Workshops	Helmets	Public Information/Multicultural	
PS0503	Burbank	Yes	No	No	Yes	Yes	No/Yes	\$65,000
PS0511	Coronado	Yes	Yes	Yes	Yes	Yes	Yes/No	\$74,247
PS0516	Glendora	Yes	No	Yes	No	No	No/No	\$92,500
PS0517	Grant School District	Yes	No	Yes	No	Yes	Yes/No	\$9,500
PS0518	Imperial Beach	No	No	Yes	Yes	No	Yes/No	\$34,160
PS0519	Los Angeles	Yes	No	Yes	Yes	No	Yes/Yes	\$232,000
PS0520	Los Angeles County	Yes	No	No	Yes	No	No/Yes	\$150,000
PS0524	Oakland	Yes	No	No	Yes	Yes	No/Yes	\$60,000
PS0529	San Jose	Yes	No	No	Yes	Yes	No/Yes	\$140,130

TASK 3 - PEDESTRIAN AND BICYCLE SAFETY PROGRAMS FOR POPULATIONS AT RISK

These bicycle and pedestrian safety programs will target populations identified to be at most risk in local communities. Activities for these projects include traffic safety rodeos, assemblies, workshops, multilingual public information and awareness efforts, incentives/promotional items, distribution of safety helmets, and selective enforcement.

Project No.	Agency	Target Populations At Risk	Rodeos/ Workshops	Equipment	Multicultural Public Information	2005 Funds
PS0401	Alhambra	Asian & Latino (pedestrians)	Yes/Yes	N/A	Yes (posters/media)	\$16,872.95
PS0413	Monterey Park	Seniors/Asian	Yes/Yes	N/A	Yes (PSAs)	\$3,300

Project No.	Agency	Target Populations At Risk	Rodeos/ Workshops	Equipment	Multicultural Public Information	2005 Funds
PS0525	Riverside	School Children	No/No	1 Bus Camera System	Yes	\$79,000
PS0528	San Diego State Univ.	Older Drivers	No/Yes	N/A	Yes	\$274,856
PS0534	San Mateo	Latino (pedestrians)	Yes/Yes	2 Changeable Message Signs	Yes	\$83,700

TASK 4 - COMPREHENSIVE TRAFFIC SAFETY PROGRAMS

These programs exercise multiple approaches in addressing more than one traffic safety need. These include media activity, traffic safety rodeos, presentations, and enforcement geared to focus on more than one traffic safety area.

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PS0414 - POMONA POLICE DEPARTMENT PEDESTRIAN SAFETY AND EDUCATION PROJECT

The Pomona Police Department will increase enforcement details and education. This grant will allow the entire traffic bureau, along with uniformed patrol officers, to conduct concentrated patrols and special operations. In addition, it will provide up to date educational fliers and brochures for distribution to the local schools and other companies in the city to educate them about laws, safety issues, current safe routes, and other pedestrian related issues. (\$55,118)

PS0423 - SANTA CLARA COUNTY COMPREHENSIVE PEDESTRIAN, BICYCLE, AND INTERSECTION SAFETY PROGRAM

The project provides funds for personnel, contractual services, travel expenses, promotional materials, and a public information campaign. Project activities include educational presentations, public information campaigns, and to distribute and properly fit safety helmets. (\$150,000)

PS0532 - TWIN CITIES POLICE DEPARTMENT ENCOURAGING SAFE BEHAVIOR ON OUR STREETS

Twin Cities (Larkspur/ Corte Madera) Police Department Traffic Unit during directed enforcement periods will use DVD camcorders to record violations. In addition, the video will be used to show violators their errant driving/riding practices. By integrating audio/visual data technology into the enforcement environment, violators will be given an opportunity for immediate feedback on their violations and an immediate opportunity to modify behavior and perceptions. (\$15,000)

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PS0530 – SANTA ANA SANTA ANA INTERAGENCY PEDESTRIAN SAFETY PROGRAM

The Traffic Engineering Department will contract with a local consultant to provide pedestrian education through the "Moving Violator" program to school aged children and senior citizens in the area. Radar Trailers will be placed throughout the city in high speed and high pedestrian traffic locations. Pedestrian Countdown Heads will be installed at the top 50 intersections in the city to warn pedestrians of the time left to cross the intersection. The Police Department with Traffic Engineering will identify pedestrian and roadway safety issues in the city and officers on overtime will be deployed to enforce school zones and other pedestrian safety violations. (\$200,000)

PS0506 - LONG BEACH**INTERAGENCY PEDESTRIAN AND BICYCLE SAFETY PROGRAM**

The project will fund vehicle speed feedback signs at key locations with high reported occurrences of pedestrian and bicycle victims. In addition, the project will fund the police department to conduct enforcement in school zones and other areas of the city. The public information campaign will consist of educational banners to be developed and placed on existing poles throughout the city. (\$241,000)

TASK 5 - STATEWIDE BICYCLE AND PEDESTRIAN SAFETY PROGRAMS

These programs target the enhancement of bicycle and pedestrian safety throughout the State.

PS0303 - SAN DIEGO STATE UNIVERSITY**IMPLEMENTATION OF OLDER ADULTS AND TRAFFIC SAFETY TASK FORCE RECOMMENDATION PROGRAM**

The project provides funds for personnel, travel, meeting room space, printing and postage. Project activities include selecting and prioritizing recommendations from the California Strategic Framework for Traffic Safety Among Older Adults report and developing a statewide implementation plan for these recommendations. The California Highway Patrol is acting as the lead agency to coordinate other state agencies to implement these recommendations statewide. The goal of this project is to develop strategies for reducing traffic-related injuries among older Californians and to lay the groundwork for implementing these strategies. (\$46,362)

PS0404 - CALIFORNIA HIGHWAY PATROL**PEDESTRIAN CORRIDOR SAFETY PROGRAM, PHASE V**

The goal of this statewide project is to reduce pedestrian-involved fatal and injury collisions on one selected corridor. Project activities include both a public awareness campaign and enhanced enforcement directed at reducing collisions on one corridor to be selected. A local task force will convene for the corridor to identify at least four factors negatively impacting pedestrian safety on the respective corridor, and to identify potential short-and/or long-term solutions. Once the potential solutions are identified, the task force will work to implement at least two of the solutions on the corridor. (\$226,312.88 for local benefit)

PS0501 - CALIFORNIA DEPARTMENT OF TRANSPORTATION**CALIFORNIA BLUEPRINT TASK FORCE**

This project will create a team of transportation professionals, advocates, and policy makers to monitor, guide and promote implementation of the California Blueprint for Bicycling and Walking. (\$100,000)

TASK 6 - EQUIPMENT PROGRAMS

Programs under this task will provide equipment with the overall goal of reducing the number of fatal and injury collisions involving pedestrians in their jurisdictions.

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PROJECT	AGENCY	PROPERTY FUNDED	2005 FUNDS
PS0315	Redlands PD	N/A	\$0
PS0406	Eureka DPW	N/A	\$0
PS0419	San Francisco	N/A	\$83,352
PS0537	Fairfield	4 Radar Display Signs 4 Pedestrian Countdown Heads	\$61,650

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PROJECT	AGENCY	PROPERTY FUNDED	2005 FUNDS
PS0405	El Monte	5 Lighted Crosswalks	\$0
PS0411	Los Angeles	20 Lighted Crosswalks	\$400,000
PS0412	Modesto	3 Lighted Crosswalks	\$60,000
PS0507	Long Beach	200 Pedestrian Countdown Heads	\$70,000
PS0508	Oakland	Pedestrian Countdown Heads for 30 signalized intersections	\$130,000
PS0526	San Carlos and Belmont PD (joint)	Pedestrian Countdown Heads for 24 intersections 1 lighted crosswalk 1 radar speed display	\$56,600
PS0536	Chino	128 Pedestrian Countdown Heads	\$42,000

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PROJECT	AGENCY	PROPERTY FUNDED	2005 FUNDS
PS0502	Chowchilla	2 Lighted Crosswalks	\$40,850
PS0504	Irvine	2 Lighted Crosswalks	\$56,400
PS0505	La Habra	10 Changeable Radar Signs	\$75,000
PS0509	Pasadena	3 Lighted Crosswalks	\$90,000
PS0510	San Fernando	2 Lighted Crosswalks	\$62,000
PS0512	Daly City	3 Lighted Crosswalks Tattle Tale intersection lights	\$124,000
PS0513	Fowler	Flashing Beacons	\$28,500
PS0514	Fullerton	18 Active Speed Feedback Signs	\$152,000
PS0515	Glendale	4 Lighted Crosswalks	\$104,000
PS0521	Merced County	1 In-pavement Roadway	\$15,000
PS0522	Montclair	1 Lighted Crosswalk	\$23,000
PS0527	San Diego County	8 vehicle feedback signs, 2 lighted Crosswalks	\$101,500

PROJECT	AGENCY	PROPERTY FUNDED	2005 FUNDS
PS0531	South San Francisco	6 Radar Signs	\$64,500
PS0535	Avalon	Flashing Beacon	\$6,000

TASK 7 - ENHANCED TRAFFIC SAFETY ANALYSIS

These programs provide data analysis of traffic patterns to develop traffic safety strategies for safer walkable and cycling communities. No projects are planned for FFY 2005 under this task.

TASK 8 - BICYCLE AND PEDESTRIAN SAFETY SOCIAL MARKETING CAMPAIGNS

Projects funded under this task will develop and implement social marketing campaigns designed to promote bicycle and pedestrian safety, and increase overall traffic safety awareness.

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PS0311 - LOS ANGELES COUNTY

PEDESTRIAN SAFETY SOCIAL MARKETING (PSSM) CAMPAIGN

This project provides funds to contract with a public relations and advertising firm to carryout messages to encourage safe pedestrian practices and vehicle driver behaviors. After careful selection of the contractor, the project is finally on its way to provide effective marketing and advertising strategies designed for the young audience via various media sources throughout Los Angeles County. Multilanguage media will be facilitated in identified target areas. (\$0)

**FISCAL YEAR 2005 PROGRAM FUNDING
(PEDESTRIAN/BICYCLE SAFETY PROGRAMS)**

Task	Title		Major Cost Items					
1	Program Development and Administrative Coordination		Personnel and Operating Expenses					
2	Pedestrian and Bicycle Safety Programs		Personnel, Educational Materials, Travel, Office Expenses, Bicycle Rodeos, Curriculum Development, Survey and Evaluation, Bicycle Helmets					
3	Pedestrian and Bicycle Safety Programs for Populations at Risk		Personnel, Bicycle Rodeos, Educational Materials, Promotionals, Travel, Bicycle Helmets, Software, PI&E Campaigns,					
4	Comprehensive Traffic Safety Programs		Personnel, Educational Materials, Bicycle Events & Rodeos, Training, Helmets, Promotional, PI&E Campaigns, Translation, Computer Equipment, Speed Trailer and Radar					
5	Statewide Bicycle and Pedestrian Safety Programs		Personnel, Travel, Brochures, Indirect Costs					

Program Code	Task No/ Agency	Funding Sources/Codes						Estimated Agency Contribution
		157	163	402	405	410	411	
PS	1 Local	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	State	\$0.00	\$0.00	\$198,210.00	\$0.00	\$0.00	\$0.00	\$0.00
PS	2 Local	\$347,272.00	\$0.00	\$857,537.00	\$0.00	\$0.00	\$0.00	\$96,031.00
	State	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PS	3 Local	\$20,172.95	\$0.00	\$162,700.00	\$0.00	\$0.00	\$0.00	\$271,044.00
	State	\$0.00	\$0.00	\$274,856.00	\$0.00	\$0.00	\$0.00	\$0.00
PS	4 Local	\$220,118.00	\$200,000.00	\$241,000.00	\$0.00	\$0.00	\$0.00	\$124,609.00
	State	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PS	5 Local	\$0.00	\$226,312.88	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	State	\$0.00	\$100,000.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,990.00

**FISCAL YEAR 2005 PROGRAM FUNDING
(PEDESTRIAN/BICYCLE SAFETY PROGRAMS)**

Task	Title		Major Cost Items					
6	Equipment Programs		In-Pavement Lighted Crosswalk Systems, Active School Zone Signs					
7	Enhanced Traffic Safety Analysis		Personnel, Training, Computer Hardware & Software					
8	Bicycle and Pedestrian Safety Social Marketing Campaigns		Personnel, Contractual Services, Travel					
Program Code	Task No/ Agency	Funding Sources/Codes						Estimated Agency Contribution
		157	163	402	405	410	411	
PS	6 Local	\$145,001.57	\$698,600.00	\$942,750.00	\$0.00	\$0.00	\$0.00	\$135,493.00
	State	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PS	7 Local	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	State	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PS	8 Local	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,000.00
	State	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PSP TOTALS								
LOCAL:		\$732,564.52	\$1,124,912.88	\$2,203,987.00	\$0.00	\$0.00	\$0.00	\$637,177.00
STATE:		\$0.00	\$100,000.00	\$473,066.00	\$0.00	\$0.00	\$0.00	\$11,990.00